

- REU Site: Interdisciplinary Renewable & Environmental Collaborative (IREC)
 - EPSCoR Principal Investigator: Frank Bowman
 - Date: 2018-05-01 to 2022-04-30
 - Agency: NSF
 - Awarded: \$339,501

- Quantifying Impact of Light Absorbing Aerosols upon Sea Ice in the Changing Arctic Climate
 - EPSCoR Principal Investigator: Jianglong Zhang
 - Date: 2020-08-01 to 2024-07-31
 - Agency: NASA
 - Awarded: \$1,199,737

- Exploring changes in elementary and middle school teachers' engineering design self-efficacy and practice through ongoing, collaborative, and culturally-relevant professional development
 - EPSCoR Principal Investigator: Frank Bowman
 - Date: 2021-01-01 to 2023-12-31
 - Agency: NSF
 - Awarded: \$450,000

- Assessment on the Habitat Quality and Cost-effectiveness of Pollinator Enhancement: an integrated Remote Sensing, Image Detection, and Economics approach
 - EPSCoR Principal Investigator: Haochi Zheng
 - Date: 2021-6-01 to 2024-05-31
 - Agency: USDA
 - Awarded: \$500,000

- MRI: Acquisition of an Acoustic Doppler Current Profiler (ADCP) System for Profiling Open Channels
 - EPSCoR Principal Investigator: Xiaodong Zhang
 - Date: 2018-09-01 to 2021-08-31
 - Agency: Center for Regional Climate Studies (CRCS)
 - Awarded: 158689

- Detection and Characteristics of Blowing Snow at ARM Sites
 - EPSCoR Principal Investigator: Aaron Kennedy
 - Date: 2018-09-15 to 2021-09-14
 - Agency: University of North Dakota Center for Regional Climate Studies (CRCS)
 - Awarded: 427684

- Development and Assessment of Blowing Snow Guidance for an IDSS Situational Awareness Display
 - EPSCoR Principal Investigator: Aaron Kennedy, Gretchen Mullendore
 - Agency: UCAR/COMET
 - Date: 2020-02-21 to 2021-04-30
 - Amount: 14984
- Assessing economic value of honeybee pollination in increasing sunflower oil yield and oil quality
 - EPSCoR Principal Investigator: Haochi Zheng
 - Agency: UND aerospace school
 - Date: 2019-05-15 to 2020-04-30
 - Amount: 10000
- Developing Earth Science laboratory activities for the Elementary Education major
 - EPSCoR Principal Investigator: Eric Brevik
 - Agency: North Dakota Space Grant
 - Date: 2019-05-15 to 2019-08-14
 - Amount: 4500
- Maximizing honeybee pollination to increase sunflower oil yield and oil quality
 - EPSCoR Principal Investigator: Haochi Zheng
 - Agency: State of North Dakota
 - Date: 2019-05-22 to 2020-06-01
 - Amount: 59113
- Sustainable landscape solutions to reduce pesticide exposure and promote establishment of beneficial insect and pollinator communities in agricultural areas
 - EPSCoR Principal Investigator: Haochi Zheng
 - Agency: Nebraska Hatch Multistate Funding
 - Date: 2016-10-01 to 2020-09-30
 - Amount: 500,000
- Mesoscale Model Intercomparison at Convection-Allowing Resolution using MODE
 - EPSCoR Principal Investigator: Gretchen Mullendore
 - Agency: Developmental Testbed Center (DTC)
 - Date: 2015-08-01 to 2016-07-31
 - Amount: 0

- BEST Robotics travel grant
 - EPSCoR Principal Investigator: Eric Brevik
 - Agency: North Dakota Department of Career and Technical Education
 - Date: 2015-10-15
 - Amount: 8000

- An innovative approach for studying fire radiative power and smoke injection height with the combined use of lidar and polarimeter observations ,
 - EPSCoR Principal Investigator: Jianglong Zhang
 - Agency: NASA
 - Date: 2018-05-07 to 2019-05-06
 - Amount: 127000

- EAGER: Observations of falling and lofted snow in windy environments.
 - EPSCoR Principal Investigator: Aaron Kennedy
 - Agency: National Science Foundation (NSF)
 - Date: 2018-06-01 to 2020-05-31
 - Amount: \$166,563

- Investigating the Impact of Aerosol and Cloud Contamination on Hyperspectral Data Assimilation for Operational Weather Forecasting through the Synergistic Use of AIRS, CrIS, MODIS, CALIOP and MISR data.
 - EPSCoR Principal Investigator: Jianglong Zhang
 - Agency: NASA
 - Date: 2018-01-05 to 2021-12-31
 - Amount: \$225,260

- Deriving phytoplankton size classes, detrital matter, particulate organic matter and particulate inorganic matter from ocean color observation.
 - EPSCoR Principal Investigator: Xiaodong Zhang
 - Agency: NASA
 - Date: 2018-01-01 to 2020-12-20
 - Amount: \$1,114,930

- Optically resolving size and density distributions of particles in the dissolved-particulate continuum from 20 nm to 20 mm to improve the estimate of carbon flux
 - EPSCoR Principal Investigator: Xiaodong Zhang
 - Co-Investigators: Deric Gray, Naval Research Laboratory, USA,
 - Yannick Huot, Université de Sherbrooke, Canada
 - Lionel Guidi, Laboratoire d'Océanographie de Villefranche, France
 - Agency: NASA
 - Date: 2017-09-20 to 2020-12-20
 - Amount: \$695,678.00

- Evaluating Model Reanalyses of Arctic Aerosol Surface and Atmospheric Forcing by Assimilating OMI over ice
 - EPSCoR Principal Investigator: Jianglong Zhang
 - Agency: NASA
 - Date: 2017-06-01 to 2020-05-31
 - Amount: \$839,508.00

- Community of Practice Focusing on Career-Ready Skills
 - Principal Investigator: Cheryl Brown (North Dakota State College of Science)
 - EPSCoR Co-Principal Investigator: Frank Bowman
 - Co-Principal Investigator: LaCosta Potter
 - Agency: US Department of Education
 - Dates: 2016-2017
 - Amount: \$300,000.00

- Eastern red cedar (*Juniperus virginiana* L.) for bioenergy production and soil health
 - Principal Investigator: Thomas Sauer (USDA-ARS National Laboratory for Agriculture and the Environment)
 - EPSCoR Co-Principal Investigator: Eric Brevik
 - Co-Principal Investigators: John C. Tyndall (Iowa State University), Diomy Zamora (University of Minnesota), and Junyong Zhu (U.S. Forest Service)
 - Agency: North Central Sun Grant
 - Date: 2017-2018
 - Amount: \$55,486.00

- Optimal garden establishment and maintenance.
 - Principal Investigator: Linda Hugelen (United Tribes Technical College)
 - EPSCoR Co-Principal Investigator: Eric Brevik
 - Co-Principal Investigators: Patricia Aune and Frank Kutka
 - Agency: US Department of Agriculture (USDA)
 - Date: 2016-2019
 - Amount: \$222,000.00

- Modeling water balance and flows of sediment and nutrient in Devils Lake watershed using SWAT
 - Principal Investigator: Afshin Shabani (University of North Dakota)
 - EPSCoR Co-Principal Investigator: Xiaodong Zhang
 - Agency: U.S. Geological Survey USGS
 - Dates: 2016-2017
 - Amount: \$2,625.00

- Investigation Seasonal and Annual Variability in Particulate Matter Pollution Over China
 - EPSCoR Principal Investigator: Jianglong Zhang
 - Agency: NASA
 - Dates: 2016
 - Amount: \$90,000.00

- Managing a sustainable landscape to support national pollination services
 - EPSCoR Principal Investigator: Haochi Zheng
 - Agency: US Department of Agriculture (USDA)
 - Date: 2015
 - Amount: \$360,201.00

- Inferring Marine Particle Properties from Polarized Volume Scattering Function (IMPROVE)
 - Principal Investigator: Ping Yang (Texas A&M University)
 - EPSCoR Co-Principal Investigator: Xiaodong Zhang
 - Agency: National Science Foundation (NSF)
 - Date: 2015
 - Amount: \$640,000.00

- MRI: Advancing Littoral Zone Aerosol Prediction via Holistic Studies in Regime-Dependent Flows
 - Principal Investigator: Steven D. Miller (Colorado State University)
 - EPSCoR Co-Principal Investigator: Jianglong Zhang
 - Agency: Office of Naval Research (ONR)
 - Dates: 2015-2020
 - Amount: \$918,113.00

- Pilot Study on the Use of PXRF for Wastewater Analysis
 - Principal Investigator: David C. Weindorf (Texas Tech University)
 - EPSCoR Co-Principal Investigator: Eric Brevik
 - Agency: US Forest Service
 - Dates: 2015-2016
 - Amount: \$2,500.00

- Tropical Oceanic Thunderstorm Hazards
 - Principal Investigator: Michael R. Poellet (University of North Dakota)
 - EPSCoR Co-Principal Investigator: Gretchen Mullendore (University of North Dakota)
 - Agency: Northrop Grumman Corp
 - Dates: 2015-2016
 - Amount: \$97,531.00

- Community of Practice Focusing on Career-Ready Skills
 - Principal Investigator: Kristi Jean (North Dakota State College of Science)
 - EPSCoR Co-Principal Investigator: Frank Bowman
 - Agency: US Department of Education
 - Dates: 2015-2016
 - Amount: \$300,000.00

- Valuation of Optical Sensors for Detection and Remediation of Crop Stress in North Dakota Precision Agriculture
 - Principal Investigator: William W. Wilson (North Dakota State University)
 - EPSCoR Co-Principal Investigator: David C. Roberts
 - Agency: North Dakota Department of Commerce
 - Dates: 2015-2017
 - Amount: \$300,000.00

- REU Site: Interdisciplinary Renewable and Environmental Chemistry – IREC
 - Principal Investigator: Alena Kubatova (University of North Dakota, ND EPSCoR Center for Sustainable Materials Science)
 - EPSCoR Co-Principal Investigator: Frank Bowman
 - Agency: National Science Foundation (NSF)
 - Dates: 2015-2018
 - Amount: \$270,000.00

- Improvement of Convective/Severe Weather Prediction through an Integrative Analysis of WRF simulations and NEXRAD/GOES observations over the CONUS.
 - Principal Investigator: Xiquan Dong (University of North Dakota)
 - EPSCoR Co-Principal Investigator: Aaron Kennedy
 - Agency: National Oceanic and Atmospheric Association (NOAA)
 - Date: 2014
 - Amount: \$492,000.00